

SEQUENCE LISTING

<110> OLSON, ERIC
SPENCER, JEFFREY A.

<120> METHODS AND COMPOSITIONS FOR STABILIZING MICROTUBULES
IN STRIATED MUSCLE CELLS

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<141> 2001-07-18

<150> 60/219,020
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<170> PatentIn Ver. 2.1

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Gly Asp Ala His Asn Met Asp Asn Leu Glu Lys Gln Leu Ile Cys Pro
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Ile Cys Leu Glu Met Phe Ser Lys Pro Val Val Ile Leu Pro Cys Gln
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His Asn Leu Cys Arg Lys Cys Ala Asn Asp Val Phe Gln Ala Ser Asn
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Pro Leu Trp Gln Ser Arg Gly Ser Thr Thr Val Ser Ser Gly Gly Arg
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ttc cga tgc cca tct tgt agg cac gag gtt gtc ctg gac agg cat ggt 471

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Tyr	Lys	Gln	Glu	Ser	Ser	Arg	Pro	Leu	His	Ala	Lys	Ala	Glu	Gln	His		
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Ser	Glu	Leu	Ser	Asp	Gly	Ile	Ala	Met	Leu	Val	Ala	Gly	Asn	Asp	Arg		
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Val	Gln	Ala	Val	Ile	Thr	Gln	Met	Glu	Glu	Val	Cys	Gln	Thr	Ile	Glu		
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Ala	Arg	Glu	Gln	Glu	Glu	Lys	Leu	Gln	Arg	Val	Arg	Gly	Leu	Ile	Arg		
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cag	tac	gga	gac	cac	ttg	gag	ggc	tcc	tca	aag	ctg	gtg	gag	tcc	gcc	999	
Gln	Tyr	Gly	Asp	His	Leu	Glu	Gly	Ser	Ser	Lys	Leu	Val	Glu	Ser	Ala		
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Ile	Gln	Ser	Met	Glu	Glu	Pro	Gln	Met	Ala	Leu	Tyr	Leu	Gln	Gln	Ala		
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gcc gct ggg gat gaa gag gat gac gac atg gct ttg gat ggg gag gag Ala Ala Gly Asp Glu Glu Asp Asp Met Ala Leu Asp Gly Glu Glu 335 340 345				1239
ggc aat gcg ggg ctg gag gag gag cggtt gac gtc gta cca gaa ggc tca Gly Asn Ala Gly Leu Glu Glu Glu Arg Leu Asp Val Pro Glu Gly Ser 350 355 360				1287
ggc ctg cac tgacccgact ctgatccaga gcgcacaccc gaagcgggag Gly Leu His 365				1336
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Lys Cys Ala Asn Asp Val Phe Gln Ala Ser Asn Pro Leu Trp Gln Ser 50 55 60				
Arg Gly Ser Thr Thr Val Ser Ser Gly Gly Arg Phe Arg Cys Pro Ser 65 70 75 80				
Cys Arg His Glu Val Val Leu Asp Arg His Gly Val Tyr Gly Leu Gln 85 90 95				
Arg Asn Leu Leu Val Glu Asn Ile Ile Asp Ile Tyr Lys Gln Glu Ser 100 105 110				
Ser Arg Pro Leu His Ala Lys Ala Glu Gln His Leu Met Cys Glu Glu 115 120 125				
His Glu Asp Glu Lys Ile Asn Ile Tyr Cys Leu Ser Cys Glu Val Pro 130 135 140				
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Thr Gln Met Glu Glu Val Cys Gln Thr Ile Glu Asp Asn Ser Arg Arg			
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Gln Lys Gln Leu Leu Asn Gln Arg Phe Glu Thr Leu Cys Ala Val Leu			
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Glu Glu Arg Lys Gly Glu Leu Leu Gln Ala Leu Ala Arg Glu Gln Glu			
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Glu Lys Leu Gln Arg Val Arg Gly Leu Ile Arg Gln Tyr Gly Asp His			
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Leu Glu Gly Ser Ser Lys Leu Val Glu Ser Ala Ile Gln Ser Met Glu			
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Glu Pro Gln Met Ala Leu Tyr Leu Gln Gln Ala Lys Glu Leu Ile Asn			
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Lys Val Gly Ala Met Ser Lys Val Glu Leu Ala Gly Arg Pro Glu Pro			
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Gly Tyr Glu Ser Met Glu Gln Phe Ser Val Ser Val Glu His Val Ala			
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Glu Met Leu Arg Thr Ile Asp Phe Gln Pro Gly Ala Ala Gly Asp Glu			
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cac aac ctg tgc agg aaa tgt gcc agt gac atc ttc cag gcc tct aac His Asn Leu Cys Arg Lys Cys Ala Ser Asp Ile Phe Gln Ala Ser Asn	45	50	55	256
ccg tac tta ccc aca aga gga ggc acc acc gtg gca tca ggg ggc cgc Pro Tyr Leu Pro Thr Arg Gly Gly Thr Thr Val Ala Ser Gly Gly Arg	60	65	70	304
ttc cgc tgt ccc tcc tgc aga cat gag gtg gtg tta gac aga cat ggg Phe Arg Cys Pro Ser Cys Arg His Glu Val Val Leu Asp Arg His Gly	80	85	90	352
gtc tat gga ctg cag agg aac ctg ctc gtg gaa aac att att gat atc Val Tyr Gly Leu Gln Arg Asn Leu Leu Val Glu Asn Ile Ile Asp Ile	95	100	105	400
tac aag cag gaa tcc acc agg cca gaa aaa aaa ttg gac cag ccc atg Tyr Lys Gln Glu Ser Thr Arg Pro Glu Lys Lys Leu Asp Gln Pro Met	110	115	120	448
tgt gaa gag cat gaa gag gaa cgc atc aac atc tat tgt ctg aac tgt Cys Glu Glu His Glu Glu Arg Ile Asn Ile Tyr Cys Leu Asn Cys	125	130	135	496
gaa gtg ccc acc tgt tcc ttg tgc aag gtt ttt ggc gcc cat aag gac Glu Val Pro Thr Cys Ser Leu Cys Lys Val Phe Gly Ala His Lys Asp	140	145	150	544
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tgc cag gtg gct ccc ctg act cat gtg ttc cag agg cag aag tca gag Cys Gln Val Ala Pro Leu Thr His Val Phe Gln Arg Gln Lys Ser Glu	160	165	170	592
ctc agt gat ggt att gct gta ctt gtg gga agc aac gat aga gtc cag Leu Ser Asp Gly Ile Ala Val Leu Val Gly Ser Asn Asp Arg Val Gln	175	180	185	640
ggt gtg atc agc cag ctg gag gac acc tgt aaa act att gag gag tgc Gly Val Ile Ser Gln Leu Glu Asp Thr Cys Lys Thr Ile Glu Glu Cys	190	195	200	688
tgc aga aag cag aaa cag gac ctg tgt gag aaa ttt gat cac cta tac Cys Arg Lys Gln Lys Gln Asp Leu Cys Glu Lys Phe Asp His Leu Tyr	205	210	215	736
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Phe Ser Ser Met Pro Pro Ala Ala Asp Val Leu Val Thr Gln Gly Glu			
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Val Val Pro Ile Gly Ser Gln Gln Thr Thr Gln Ser Glu Thr Ser Gly			
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gtg agt ggt aag gag tct agt tca act gca gct acc tct cag att gga	495	1600
Val Ser Gly Lys Glu Ser Ser Thr Ala Ala Thr Ser Gln Ile Gly	500	
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Phe Glu Ala Pro Ser Pro Gln Gly Gln Ser Ala Ala Leu Gly Ser Gly	515	
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Lys Cys Ala Ser Asp Ile Phe Gln Ala Ser Asn Pro Tyr Leu Pro Thr
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Arg Gly Gly Thr Thr Val Ala Ser Gly Gly Arg Phe Arg Cys Pro Ser
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Cys Arg His Glu Val Val Leu Asp Arg His Gly Val Tyr Gly Leu Gln
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Leu Glu Lys Gln Leu Ile Cys Pro Ile Cys Leu Glu Met Phe Thr Lys
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85 90 95

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Pro Leu Gln Lys Gly Ser His Pro Met Cys Lys Glu His Glu Asp Glu
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Cys Lys Val Phe Gly Ala His Gln Ala Cys Glu Val Ala Pro Leu Gln
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acc aag ctt gtg gag acc gcc atc cag tcc ctg gat gag ccc gga ggg Thr Lys Leu Val Glu Thr Ala Ile Gln Ser Leu Asp Glu Pro Gly Gly	260	265	270	1114	
gct acc ttc ctc tca agt gcc aag cag ctc atc aag agc att gta gaa Ala Thr Phe Leu Ser Ser Ala Lys Gln Leu Ile Lys Ser Ile Val Glu	275	280	285	1162	
gcc tcc aag ggc tgc cag ctg ggg aag aca gag caa ggc ttt gag aac Ala Ser Lys Gly Cys Gln Leu Gly Lys Thr Glu Gln Gly Phe Glu Asn	290	295	300	1210	
atg gac tac ttt act ctg gac tta gaa cac ata gca gag gcc ttg agg Met Asp Tyr Phe Thr Leu Asp Leu Glu His Ile Ala Glu Ala Leu Arg	305	310	315	320	1258
gcc att gac ttt ggg aca ggt aaa gga tgt gat gtt aca tgt ttg acc Ala Ile Asp Phe Gly Thr Gly Lys Gly Cys Asp Val Thr Cys Leu Thr	325	330	335	1306	
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35 40 45

Asn Asp Ile Phe Gln Ala Ala Asn Pro Tyr Trp Thr Asn Arg Gly Gly
50 55 60

Ser Val Ser Met Ser Gly Gly Arg Phe Arg Cys Pro Ser Cys Arg His
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Glu Val Ile Met Asp Arg His Gly Val Tyr Gly Leu Gln Arg Asn Leu
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Leu Val Glu Asn Ile Ile Asp Ile Tyr Lys Gln Glu Cys Ser Ser Arg
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Pro Leu Gln Lys Gly Ser His Pro Met Cys Lys Glu His Glu Asp Glu
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Lys Ile Asn Ile Tyr Cys Leu Thr Cys Glu Val Pro Thr Cys Ser Leu
130 135 140

Cys Lys Val Phe Gly Ala His Gln Ala Cys Glu Val Ala Pro Leu Gln
145 150 155 160

Ser Ile Phe Gln Gly Gln Lys Thr Glu Leu Ser Asn Cys Ile Ser Met
165 170 175

Leu Val Ala Gly Asn Asp Arg Val Gln Thr Ile Ile Ser Gln Leu Glu
180 185 190

Asp Ser Cys Arg Val Thr Lys Glu Asn Ser His Gln Val Lys Glu Glu
195 200 205

Leu Ser Gln Lys Phe Asp Thr Leu Tyr Ala Ile Leu Asp Glu Lys Lys
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Ser Glu Leu Leu Gln Arg Ile Thr Gln Glu Gln Glu Glu Lys Leu Gly
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Phe Ile Glu Ala Leu Ile Leu Gln Tyr Arg Glu Gln Leu Glu Lys Ser
245 250 255

Thr Lys Leu Val Glu Thr Ala Ile Gln Ser Leu Asp Glu Pro Gly Gly
260 265 270

Ala Thr Phe Leu Ser Ser Ala Lys Gln Leu Ile Lys Ser Ile Val Glu
275 280 285

Ala Ser Lys Gly Cys Gln Leu Gly Lys Thr Glu Gln Gly Phe Glu Asn
290 295 300

Met Asp Tyr Phe Thr Leu Asp Leu Glu His Ile Ala Glu Ala Leu Arg
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Ala Ile Asp Phe Gly Thr Gly Lys Gly Cys Asp Val Thr Cys Leu Thr
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